Q1] Create an android application to demonstrate the working of implicit intent. Use uriparsing.

Activity_main.xml:

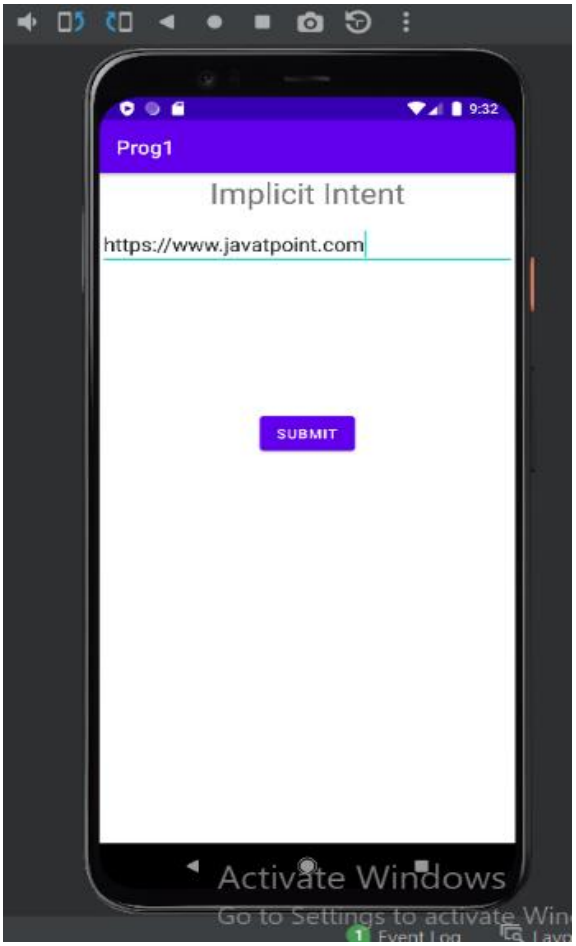
```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".MainActivity"
    android:orientation="vertical">
    <TextView
      android:layout_width="match_parent"
      android:layout_height="wrap_content"
      android:text="Implicit Intent"
      android:textSize="30dp"
      android:textAlignment="center"
      android:paddingBottom="10dp"/>
    <EditText
       android:id="@+id/ed1"
       android:layout_width="match_parent"
       android:layout_height="wrap_content"
       android:hint="Enter the url"
       android:textSize="20dp"/>
    <Button
       android:id="@+id/btn1"
       android:layout_width="wrap_content"
       android:layout_height="wrap_content"
       android:text="Submit"
       android:layout_gravity="center"
       android:layout_marginTop="150dp"/>

</LinearLayout>
```

Mainactivity.java:

```
package com.example.implicitintent;
import androidx.appcompat.app.AppCompatActivity;
import android.content.Intent;
import  android.net.Uri;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
public class MainActivity extends AppCompatActivity {
    EditText ed1;
    Button btn1;
```

```
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        ed1=findViewById(R.id.ed1);
        btn1=findViewById(R.id.btn1);
        btn1.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view) {
                String url=ed1.getText().toString();
                Intent intent=new Intent(Intent.ACTION_VIEW,Uri.parse(url));
                startActivity(intent);
            }
        });
    }
}
```

Output:



Q2] Create an android application to demonstrate the working of implicit intent. Use PhoneCalling.

Activity_main.xml:

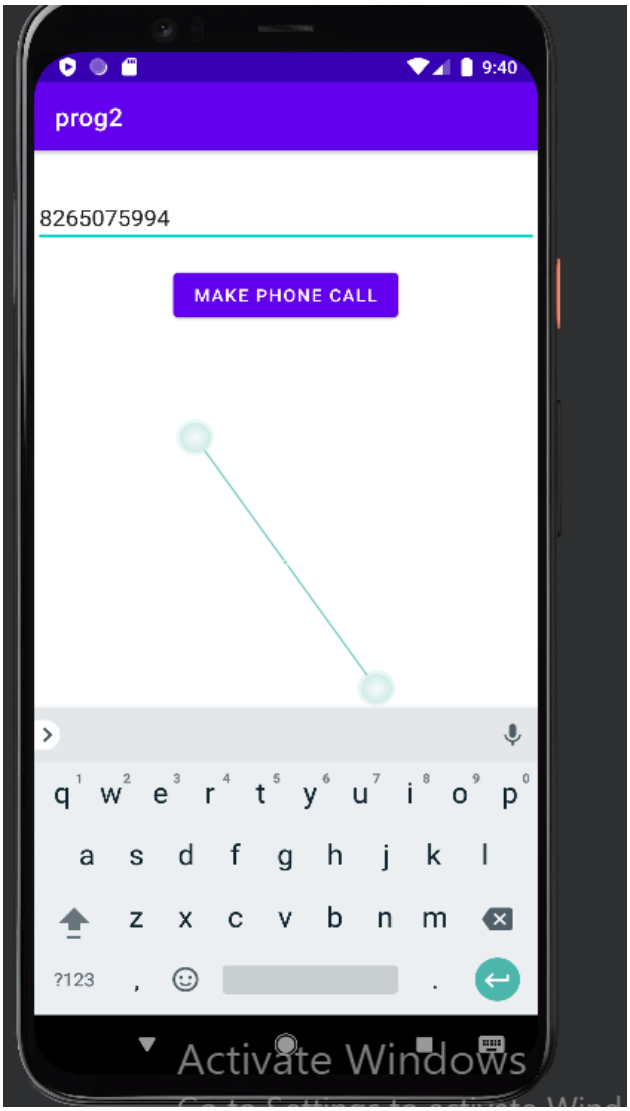
```
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
android:layout_height="match_parent"
    tools:context=".MainActivity">

    <EditText
        android:id="@+id/phoneNumberEditText"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:hint="Enter Phone Number"
        android:layout_marginTop="32dp"
        android:layout_centerHorizontal="true" />

    <Button
        android:id="@+id/callButton"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Make Phone Call"
        android:layout_below="@id/phoneNumberEditText"
        android:layout_centerHorizontal="true"
        android:layout_marginTop="16dp" />
</RelativeLayout>
```

Mainactivity.java:

```
package com.example.callprogram;

import android.Manifest;
import android.content.Intent;
import android.content.pm.PackageManager;
import android.net.Uri;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import androidx.annotation.NonNull;
import androidx.appcompat.app.AppCompatActivity;
import androidx.core.app.ActivityCompat;
import androidx.core.content.ContextCompat;

import com.example.callprogram.R;
```

```
public class MainActivity extends AppCompatActivity {

    private static final int REQUEST_CALL_PERMISSION = 1;
    private EditText phoneNumberEditText;
    private Button callButton;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);

        phoneNumberEditText = findViewById(R.id.phoneNumberEditText);
        callButton = findViewById(R.id.callButton);
        callButton.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                makePhoneCall();
            }
        });
    }

    private void makePhoneCall() {
        String phoneNumber = phoneNumberEditText.getText().toString();

        if (!phoneNumber.isEmpty()) {
            String dial = "tel:" + phoneNumber;

            if (ContextCompat.checkSelfPermission(this, Manifest.permission.CALL_PHONE) !=
PackageManager.PERMISSION_GRANTED) {
                ActivityCompat.requestPermissions(this, new
String[]{Manifest.permission.CALL_PHONE}, REQUEST_CALL_PERMISSION);
            } else {
                Intent callIntent = new Intent(Intent.ACTION_CALL);
                callIntent.setData(Uri.parse(dial));
                startActivity(callIntent);
            }
        }
    }
}
```

Output:



Q3] Create an android application to demonstrate the working of implicit intent. Use Email.

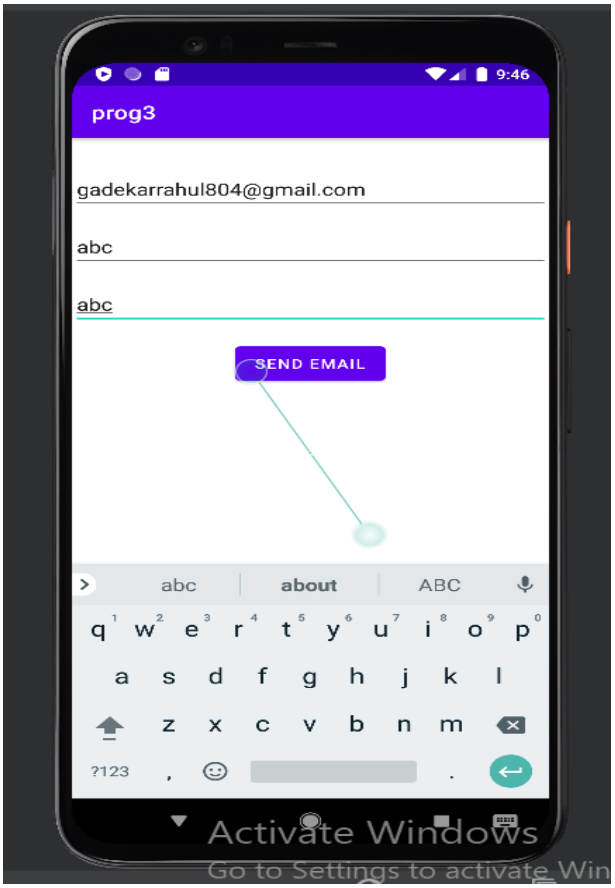
Activity_main.xml:

```
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
   xmlns:app="http://schemas.android.com/apk/res-auto"
   xmlns:tools="http://schemas.android.com/tools"
   android:layout_width="match_parent"
   android:layout_height="match_parent"
   tools:context=".MainActivity">
   <EditText
      android:id="@+id/recipientEditText"
      android:layout_width="match_parent"
      android:layout_height="wrap_content"
      android:hint="Recipient Email Address"
      android:layout_marginTop="32dp"
      android:layout_centerHorizontal="true" />
   <EditText
      android:id="@+id/subjectEditText"
      android:layout_width="match_parent
   android:layout_height="wrap_content"
      android:hint="Subject"
      android:layout_below="@+id/recipient
      EditText"
      android:layout_marginTop="16dp"
      android:layout_centerHorizontal="true"
      />
   <EditText
      android:id="@+id/bodyEditText"
      android:layout_width="match_parent"
      android:layout_height="wrap_content"
      android:hint="Body"
      android:layout_below="@+id/subjectEditText"
      android:layout_marginTop="16dp"
      android:layout_centerHorizontal="true" />
   <Button
      android:id="@+id/sendEmailButton"
      android:layout_width="wrap_content"
      android:layout_height="wrap_content"
      android:text="Send Email"
      android:layout_below="@id/bodyEditText"
      android:layout_centerHorizontal="true"
      android:layout_marginTop="16dp" />
</RelativeLayout>
```

Mainactivity.java:

```
package com.example.emailprogram;
import android.content.Intent;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import androidx.appcompat.app.AppCompatActivity;
public class MainActivity extends AppCompatActivity {
    private EditText recipientEditText;
    private EditText subjectEditText;
    private EditText bodyEditText;
    private Button sendEmailButton;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);

        recipientEditText = findViewById(R.id.recipientEditText);
        subjectEditText = findViewById(R.id.subjectEditText);
        bodyEditText = findViewById(R.id.bodyEditText);
        sendEmailButton = findViewById(R.id.sendEmailButton);
        sendEmailButton.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                sendEmail();
            }
        });
    }
    private void sendEmail() {
        String recipientEmail = recipientEditText.getText().toString().trim();
        String subject = subjectEditText.getText().toString();
        String body = bodyEditText.getText().toString();
        if (!recipientEmail.isEmpty()) {
            Intent emailIntent = new Intent(Intent.ACTION_SEND);
            emailIntent.setType("text/plain");
            emailIntent.putExtra(Intent.EXTRA_EMAIL, new String[]{recipientEmail});
            emailIntent.putExtra(Intent.EXTRA_SUBJECT, subject);
            emailIntent.putExtra(Intent.EXTRA_TEXT, body);

        }
    }
}
```

Output:


9:46
prog3
gadekarrahul804@gmail.com
abc
abc
SEND EMAIL
abc
about
ABC
Activate Windows
Go to Settings to activate Win

XMLFile:-

```
package com.example.registration;

import android.content.Intent;
import android.os.Bundle;
import android.widget.TextView;

import androidx.appcompat.app.AppCompatActivity;

public class SecondActivity extends AppCompatActivity {

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_second);

        TextView textViewName = findViewById(R.id.textViewName);
        TextView textViewEmail = findViewById(R.id.textViewEmail);
        TextView textViewPassword = findViewById(R.id.textViewPassword);

        // Get the data passed from the first activity
        Intent intent = getIntent();
        String name = intent.getStringExtra("name");
        String email = intent.getStringExtra("email");
        String password = intent.getStringExtra("password");

        // Display the user credentials in the second activity
        textViewName.setText("Name: " + name);
        textViewEmail.setText("Email: " + email);
        textViewPassword.setText("Password: " + password);
    }
}
```

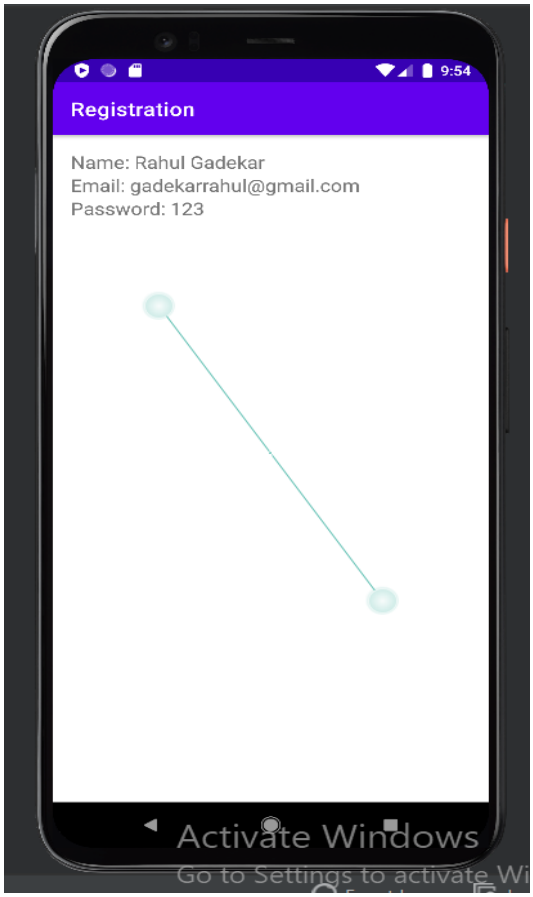
Java File:-

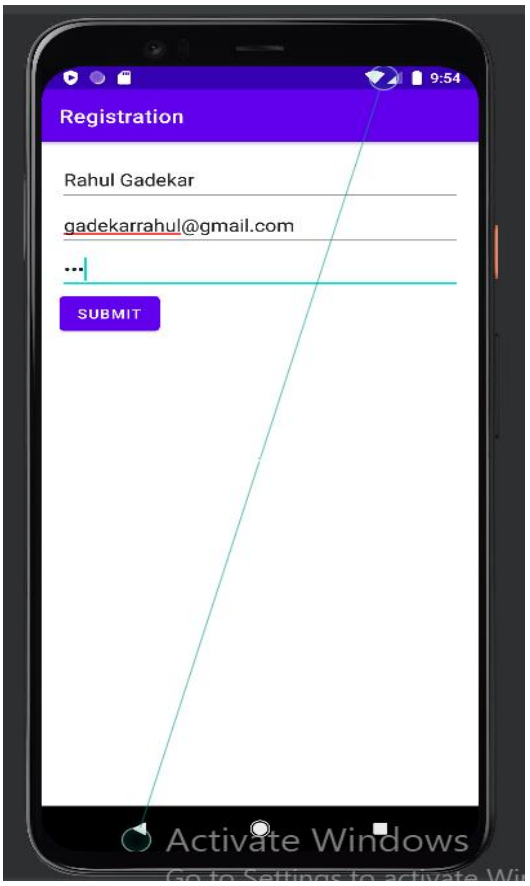
```
package com.example.registration;

import android.content.Intent;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;

import androidx.appcompat.app.AppCompatActivity;

import com.example.registration.SecondActivity;

public class MainActivity extends AppCompatActivity {

    private EditText editTextName, editTextEmail, editTextPassword;
    private Button btnSubmit;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
```

```
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);

        editTextName = findViewById(R.id.editTextName);
        editTextEmail = findViewById(R.id.editTextEmail);
        editTextPassword = findViewById(R.id.editTextPassword);
        btnSubmit = findViewById(R.id.btnSubmit);

        btnSubmit.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view) {
                String name = editTextName.getText().toString();
                String email = editTextEmail.getText().toString();
                String password = editTextPassword.getText().toString();

                // Create an intent to start the second activity
                Intent intent = new Intent(MainActivity.this, SecondActivity.class);

                // Pass the user credentials to the second activity
                intent.putExtra("name", name);
                intent.putExtra("email", email);
                intent.putExtra("password", password);

                // Start the second activity
                startActivity(intent);
            }
        });

    }
}


package com.example.registration;

import android.content.Intent;
import android.os.Bundle;
import android.widget.TextView;

import androidx.appcompat.app.AppCompatActivity;

public class SecondActivity extends AppCompatActivity {

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_second);

        TextView textViewName = findViewById(R.id.textViewName);
        TextView textViewEmail = findViewById(R.id.textViewEmail);
        TextView textViewPassword = findViewById(R.id.textViewPassword);

        // Get the data passed from the first activity
        Intent intent = getIntent();
        String name = intent.getStringExtra("name");
        String email = intent.getStringExtra("email");
        String password = intent.getStringExtra("password");
```

```
        // Display the user credentials in the second activity
        textViewName.setText("Name: " + name);
        textViewEmail.setText("Email: " + email);
        textViewPassword.setText("Password: " + password);
    }
}
```

Output :





Q5]Create an android application to demonstrate the working of bundle class, where createfirst activity as student marksheet and display the content result on second activity and display congratulation on third activity or try again on third activity.Use bundle concept.

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout
    xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:orientation="vertical"
    android:padding="16dp"
    tools:context=".MainActivity">

    <EditText
        android:id="@+id/markEditText1"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:hint="Enter Mark 1"
        android:inputType="number" />

    <EditText
        android:id="@+id/markEditText2"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:hint="Enter Mark 2"
        android:inputType="number" />

    <EditText
        android:id="@+id/markEditText3"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:hint="Enter Mark 3"
        android:inputType="number" />

    <Button
        android:id="@+id/calculateButton"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Calculate Result" />
</LinearLayout>
```

Java Code :

```
package com.example.studentmarksheet;

import androidx.appcompat.app.AppCompatActivity;
```

```
import android.os.Bundle;

import android.content.Intent;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.Toast;

import androidx.appcompat.app.AppCompatActivity;

public class MainActivity extends AppCompatActivity {

    private EditText markEditText1, markEditText2, markEditText3;
    private Button calculateButton;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);

        markEditText1 = findViewById(R.id.markEditText1);
        markEditText2 = findViewById(R.id.markEditText2);
        markEditText3 = findViewById(R.id.markEditText3);
        calculateButton = findViewById(R.id.calculateButton);

        calculateButton.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                int mark1 = Integer.parseInt(markEditText1.getText().toString());
                int mark2 = Integer.parseInt(markEditText2.getText().toString());
                int mark3 = Integer.parseInt(markEditText3.getText().toString());

                int totalMarks = mark1 + mark2 + mark3;
                int averageMarks = totalMarks / 3;

                String result;

                if (averageMarks >= 60) {
                    result = "Pass";
                } else {
                    result = "Fail";
                }

                Intent intent = new Intent(MainActivity.this, ResultActivity.class);
                intent.putExtra("RESULT", result);
                startActivity(intent);
            }
```

```
        });
    }
}
```

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout
    xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:orientation="vertical"
    android:padding="16dp"
    tools:context=".ResultActivity">

    <TextView
        android:id="@+id/resultText"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Result will be displayed here" />

    <Button
        android:id="@+id/proceedButton"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Proceed" />
</LinearLayout>
```

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout
    xmlns:android="http://schemas.android.com/apk/res/android"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:orientation="vertical"
    android:padding="16dp">

    <TextView
        android:id="@+id/finalMessage"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Congratulations or Try Again message will be displayed here" />
</LinearLayout>
```

```
package com.example.studentmarksheet;

import android.content.Intent;
```

```
import  android.os.Bundle;
import android.widget.TextView;

import androidx.appcompat.app.AppCompatActivity;

public class FinalActivity extends AppCompatActivity {

    private TextView finalMessage;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_final);

        finalMessage = findViewById(R.id.finalMessage);

        Intent intent = getIntent();
        String result = intent.getStringExtra("RESULT");

        if (result != null) {
            if (result.equals("Pass")) {
                finalMessage.setText("Congratulations!");
            } else {
                finalMessage.setText("Try Again.");
            }
        } else {
            finalMessage.setText("Result is not available.");
        }
    }
}
```

Q6] Create an android application to demonstrate working of simple adapter

Activity_main.xml:

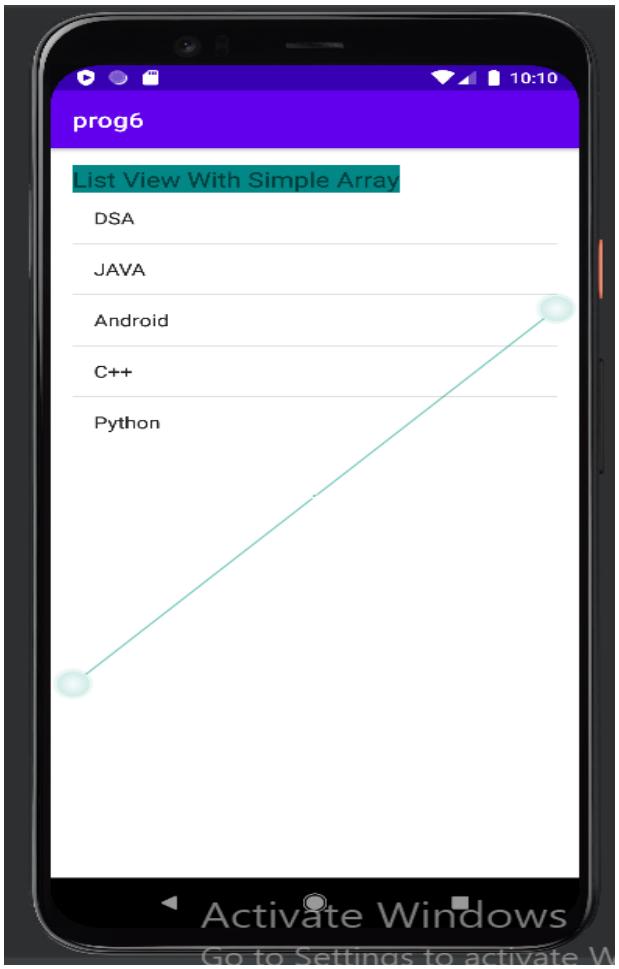
```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout
    xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:orientation="vertical"
    android:padding="16dp"
    tools:context=".MainActivity">
    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="List View With Simple Array"
        android:backgroundTint="@color/teal_700"
        android:background="@color/teal_700"
        android:textSize="20dp"
        />

    <ListView
        android:id="@+id/listView"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"/>

</LinearLayout>
```

Mainactivity.java:

```
package com.example.listview;

import android.os.Bundle;
import android.widget.ArrayAdapter;
import android.widget.ListView;
import androidx.appcompat.app.AppCompatActivity;

public class MainActivity extends AppCompatActivity {

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        String[] items = {"DSA", "JAVA", "Android", "C++", "Python"};
        ArrayAdapter<String> adapter = new ArrayAdapter<>(this,
android.R.layout.simple_list_item_1, items);
        ListView listView = findViewById(R.id.listView);
        listView.setAdapter(adapter);
```

```
    }
}
```

Output:


10:10
prog6
List View With Simple Array
DSA
JAVA
Android
C++
Python
Activate Windows

Q7] Create an android application to demonstrate the working of custom adapter usestring.xml resource file.

Activity_main.xml:

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:orientation="vertical"
    android:padding="16dp"
    tools:context=".MainActivity">

    <EditText
        android:id="@+id/nameEditText"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:hint="Enter your name" />

    <Spinner
        android:id="@+id/pizzaTypeSpinner"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_marginTop="16dp"
        android:entries="@array/pizza_types" />


    <Button
        android:id="@+id/submitButton"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="Submit" />

</LinearLayout>
```

Mainactivity.java:

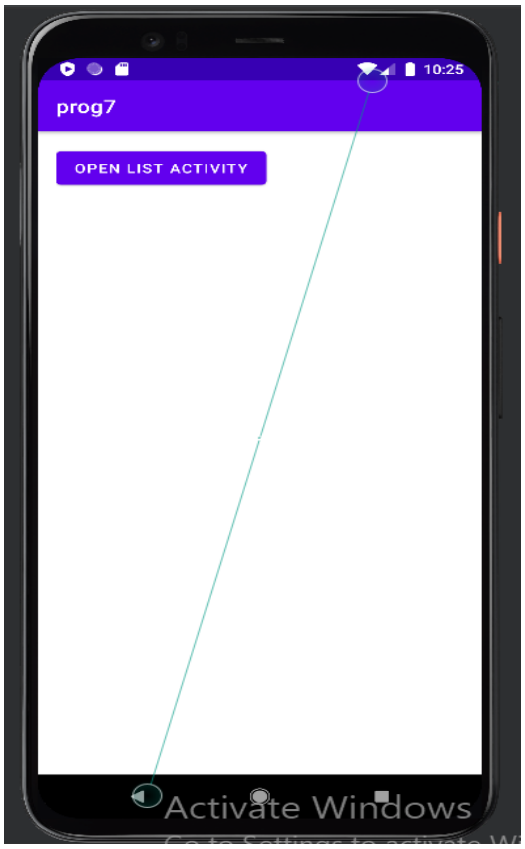
```
package com.example.pizzaordering;

import android.content.Intent;
import android.os.Bundle;
import android.view.View;
import android.widget.AdapterView;
import android.widget.ArrayAdapter;
import  android.widget.Button;
import android.widget.EditText;
import android.widget.Spinner;
```

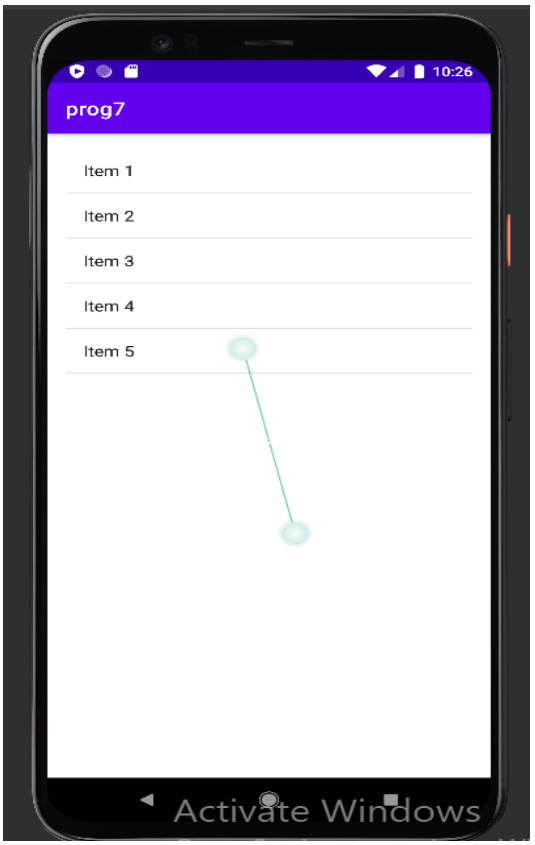
```
import androidx.appcompat.app.AppCompatActivity;

import com.example.pizzaordering.OrderSummaryActivity;
import com.example.pizzaordering.R;

public class MainActivity extends AppCompatActivity {
    private EditText nameEditText;
    private Spinner pizzaTypeSpinner;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);

        nameEditText = findViewById(R.id.nameEditText);
        pizzaTypeSpinner = findViewById(R.id.pizzaTypeSpinner);

        // Create an ArrayAdapter using the string array and a default spinner layout
        ArrayAdapter<CharSequence> adapter = ArrayAdapter.createFromResource(
                this,
                R.array.pizza_types,
                android.R.layout.simple_spinner_item
        );

        // Specify the layout to use when the list of choices appears
        adapter.setDropDownViewResource(android.R.layout.simple_spinner_dropdown_item);

        // Apply the adapter to the spinner
        pizzaTypeSpinner.setAdapter(adapter);

        // Set a hint for the spinner
        pizzaTypeSpinner.setPrompt("Select pizza type");

        Button submitButton = findViewById(R.id.submitButton);
        submitButton.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view) {
                String name = nameEditText.getText().toString();
                String pizzaType = pizzaTypeSpinner.getSelectedItem().toString();


                 Intent intent = new Intent(MainActivity.this, OrderSummaryActivity.class);
                                        intent.putExtra("name", name);
            }   intent.putExtra("pizzaType", pizzaType);
        });     startActivity(intent);
    }
}
```

arrays.xml:

```
<resources>
    <string-array name="pizza_types">
        <item>Cheese Pizza</item>
        <item>Pepperoni Pizza</item>
        <item>Veggie Pizza</item>
        <!-- Add more pizza types as needed -->
    </string-array>
</resources>
```

Output:





Q8] Create an android application to implement Alert dialog box , where create a quiz of atleast 5 MCQ and display the result on alert box and after click on positive button of alertBox display toast successful.

Activity_main.xml:

```
<LinearLayout
    xmlns:android="http://schemas.android.com/apk/res/android"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:orientation="vertical">

    <!-- Question 1 -->
    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Question 1: What is the capital of France?" />

    <RadioGroup
        android:id="@+id/radio_group_question1"
        android:layout_width="match_parent"
        android:layout_height="wrap_content">
        <RadioButton
            android:id="@+id/option1_question1"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:text="Paris" />

        <RadioButton
            android:id="@+id/option2_question1"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:text="London" />
    </RadioGroup>

    <!-- Question 2 -->
    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Question 2: What is the largest planet in our solar system?" />

    <RadioGroup
        android:id="@+id/radio_group_question2"
        android:layout_width="match_parent"
        android:layout_height="wrap_content">

        <RadioButton
            android:id="@+id/option1_question2"
```

```
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Mars" />

    <RadioButton
        android:id="@+id/option2_question2"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Jupiter" />
</RadioGroup>

<TextView
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Question 3: Which is the java framework?" />

<RadioGroup
    android:id="@+id/radio_group_question3"
    android:layout_width="match_parent"
    android:layout_height="wrap_content">

    <RadioButton
        android:id="@+id/option1_question3"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Django" />

    <RadioButton
        android:id="@+id/option2_question3"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Springboot" />
</RadioGroup>
<TextView
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Question 4: Which is the python framework?" />

<RadioGroup
    android:id="@+id/radio_group_question4"
    android:layout_width="match_parent"
    android:layout_height="wrap_content">

    <RadioButton
        android:id="@+id/option1_question4"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Django" />
```

```
        <RadioButton
            android:id="@+id/option2_question4"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:text="Springboot" />
    </RadioGroup>
    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Question 5: Which is the object oriented language" />

    <RadioGroup
        android:id="@+id/radio_group_question5"
        android:layout_width="match_parent"
        android:layout_height="wrap_content">

        <RadioButton
            android:id="@+id/option1_question5"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:text="Java" />

        <RadioButton
            android:id="@+id/option2_question5"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:text="C" />
    </RadioGroup>

    <Button
        android:id="@+id/submit_button"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Submit Quiz" />
</LinearLayout>
```

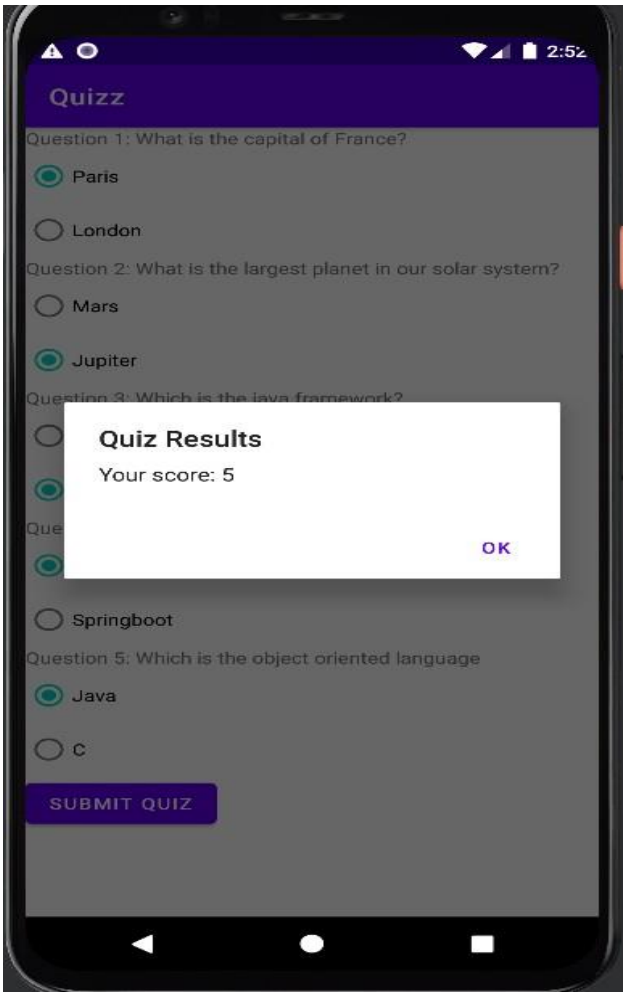
Mainactivity.java:

```
package com.example.quizz;

import android.app.AlertDialog;
import android.content.DialogInterface;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.RadioGroup;
import android.widget.Toast;
import androidx.appcompat.app.AppCompatActivity;
```

```
public class MainActivity extends AppCompatActivity {

    private int score = 0;
    private RadioGroup question1RadioGroup;
    private RadioGroup question2RadioGroup;
    private RadioGroup question3RadioGroup;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);

        question1RadioGroup = findViewById(R.id.radio_group_question1);
        question2RadioGroup = findViewById(R.id.radio_group_question2);
        question3RadioGroup = findViewById(R.id.radio_group_question3);
        Button submitButton = findViewById(R.id.submit_button);
        submitButton.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view) {
                calculateScore();
                showScoreDialog(score);
            }
        });
    }

    private void calculateScore() {
        // Question 1: Check the selected answer and update the score
        int selectedAnswer1 = question1RadioGroup.getCheckedRadioButtonId();
        if (selectedAnswer1 == R.id.option1_question1) {
            score++;
        }

        // Question 2: Check the selected answer and update the score
        int selectedAnswer2 = question2RadioGroup.getCheckedRadioButtonId();
        if (selectedAnswer2 == R.id.option2_question2) {
            score++;
        }
        int selectedAnswer3 = question3RadioGroup.getCheckedRadioButtonId();
        if (selectedAnswer3 == R.id.option2_question3) {
            score++;
        }
        int selectedAnswer4 = question3RadioGroup.getCheckedRadioButtonId();
        if (selectedAnswer4 == R.id.option2_question3) {
            score++;
        }
        int selectedAnswer5 = question3RadioGroup.getCheckedRadioButtonId();
        if (selectedAnswer5 == R.id.option2_question3) {
            score++;
        }
```

```
    }

    private void showScoreDialog(int score) {
        AlertDialog.Builder builder = new AlertDialog.Builder(this);
        builder.setTitle("Quiz Results");
        builder.setMessage("Your score: " + score);
        builder.setPositiveButton("OK", new DialogInterface.OnClickListener() {
            @Override
            public void onClick(DialogInterface dialog, int which) {
                dialog.dismiss();
                // Display a thank you message when the dialog is dismissed
                Toast.makeText(getApplicationContext(), "Thank you!",
Toast.LENGTH_SHORT).show();
            }
        });

        AlertDialog dialog = builder.create();
        dialog.show();
    }
}
```

Output:



Q9] Create an android application to implement Date Picker dialog box

Activity_main.xml:

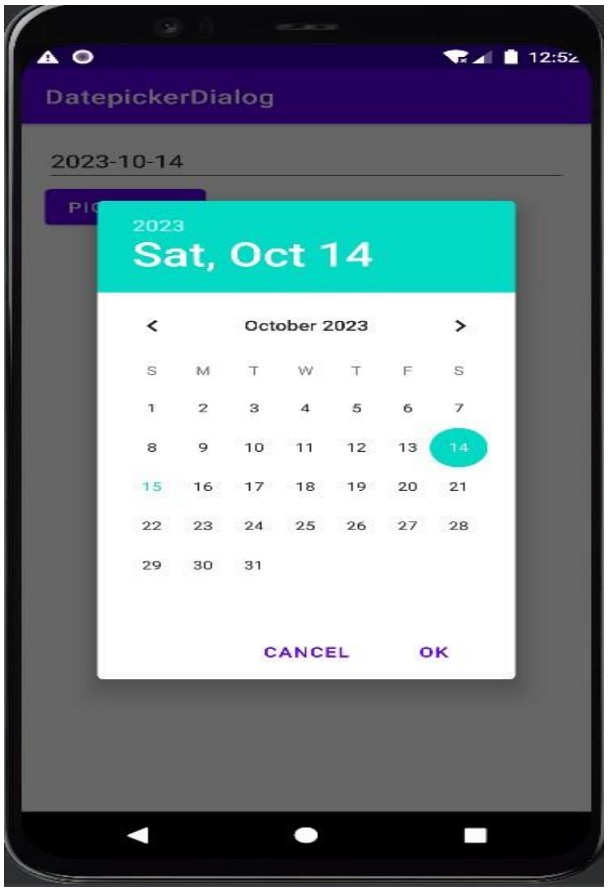
```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout
    xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:orientation="vertical"
    android:padding="16dp"
    tools:context=".MainActivity">

    <EditText
        android:id="@+id/dateEditText"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:hint="Select Date"
        android:focusable="false"
        android:clickable="true"
        android:inputType="none" />

    <Button
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Pick Date"
        android:id="@+id/pickDateButton" />
</LinearLayout>
```

Mainactivity.java:

```
package com.example.datepickerdialog;
import androidx.appcompat.app.AppCompatActivity;
import android.app.DatePickerDialog;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.DatePicker;
import android.widget.EditText;
import java.util.Calendar;
public class MainActivity extends AppCompatActivity {
    private EditText dateEditText;
    private Button pickDateButton;
    private Calendar calendar;
    private int year, month, day;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
```

```
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        dateEditText = findViewById(R.id.dateEditText);
        pickDateButton = findViewById(R.id.pickDateButton);
        calendar = Calendar.getInstance();
        year = calendar.get(Calendar.YEAR);
        month = calendar.get(Calendar.MONTH);
        day = calendar.get(Calendar.DAY_OF_MONTH);
        pickDateButton.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                showDatePickerDialog();
            }
        });
    }
    private void showDatePickerDialog() {
        DatePickerDialog datePickerDialog = new DatePickerDialog(this,
                new DatePickerDialog.OnDateSetListener() {
                    @Override
                    public void onDateSet(DatePicker view, int selectedYear, int selectedMonth, int
selectedDay) {
                        year = selectedYear;
                        month = selectedMonth;
                        day = selectedDay;
                        dateEditText.setText(year + "-" + (month + 1) + "-" + day);
                    }
                }, year, month, day);
        datePickerDialog.show();
    }
}
```

Output:


12:52
DatepickerDialog
2023-10-14
2023
Sat, Oct 14
October 2023
S M T W T F S
1 2 3 4 5 6 7
8 9 10 11 12 13 14
15 16 17 18 19 20 21
22 23 24 25 26 27 28
29 30 31
CANCEL
OK

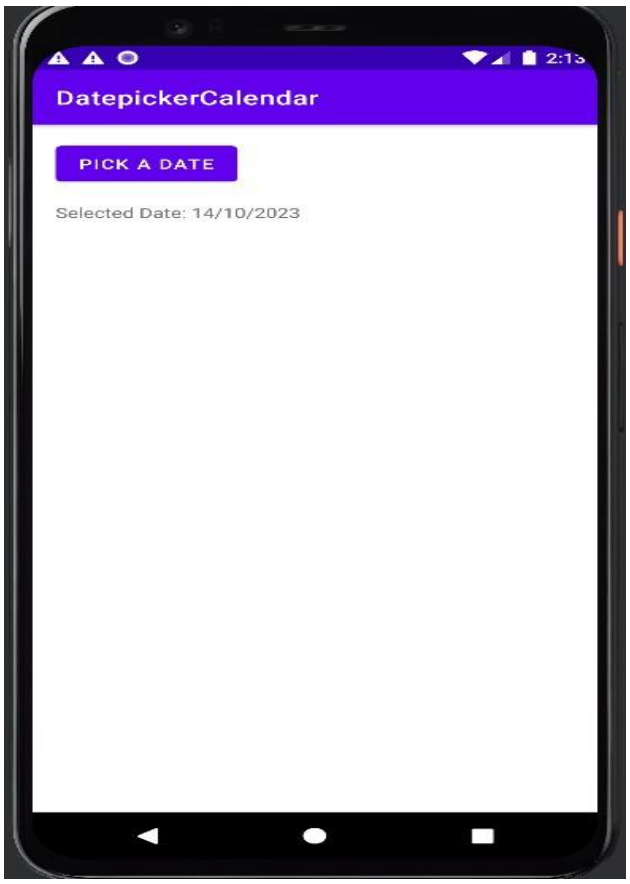
Q10] Create an android application to implement Date Picker using Calendar class.

```
<LinearLayout
    xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:orientation="vertical"
    android:padding="16dp"
    tools:context=".MainActivity">

    <Button
        android:id="@+id/pickDateButton"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Pick a Date" />

    <TextView
        android:id="@+id/displayDateText"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginTop="16dp"
        android:text="" />
</LinearLayout>
```

Mainactivity.java:

```
package com.example.datepickercalendar;

import androidx.appcompat.app.AppCompatActivity;

import android.app.DatePickerDialog;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.DatePicker;
import android.widget.TextView;

import java.text.SimpleDateFormat;
import java.util.Calendar;
import java.util.Locale;

public class MainActivity extends AppCompatActivity {

    private Button pickDateButton;
    private TextView displayDateText;
    private Calendar calendar;
```

```
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);

        pickDateButton = findViewById(R.id.pickDateButton);
        displayDateText = findViewById(R.id.displayDateText);
        calendar = Calendar.getInstance();

        pickDateButton.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                int year = calendar.get(Calendar.YEAR);
                int month = calendar.get(Calendar.MONTH);
                int day = calendar.get(Calendar.DAY_OF_MONTH);

                // Create a DatePickerDialog to pick a date
                DatePickerDialog datePickerDialog = new DatePickerDialog(
                        MainActivity.this,
                        new DatePickerDialog.OnDateSetListener() {
                            @Override
                            public void onDateSet(DatePicker view, int year, int month, int
dayOfMonth) {
                                calendar.set(Calendar.YEAR, year);
                                calendar.set(Calendar.MONTH, month);
                                calendar.set(Calendar.DAY_OF_MONTH, dayOfMonth);
                                updateDisplayDate();
                            }
                        },

                        year, month, day
                );

                datePickerDialog.show();
            }
        });
    }

    private void updateDisplayDate() {
        SimpleDateFormat sdf = new SimpleDateFormat("dd/MM/yyyy", Locale.US);
        String formattedDate = sdf.format(calendar.getTime());
        displayDateText.setText("Selected Date: " + formattedDate);
    }
}
```


DatepickerCalendar
PICK A DATE
Selected Date: 14/10/2023

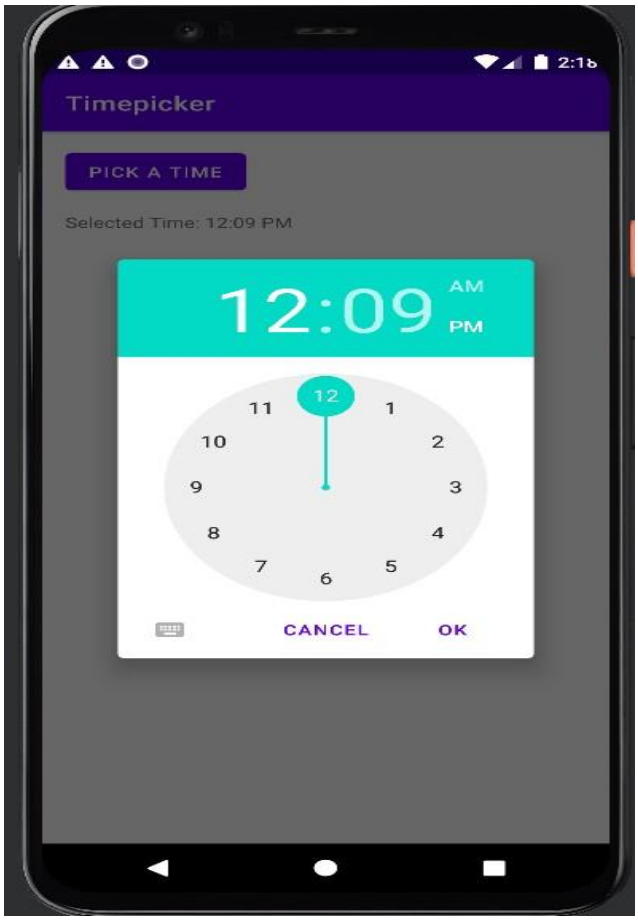
Q11] Create an android application to implement Time picker.

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout
    xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:orientation="vertical"
    android:padding="16dp"
    tools:context=".MainActivity">

    <Button
        android:id="@+id/pickTimeButton"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Pick a Time" />

    <TextView
        android:id="@+id/displayTimeText"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginTop="16dp"
        android:text="" />
</LinearLayout>
```

Mainactivity.java:

```
package com.example.timepicker;

import androidx.appcompat.app.AppCompatActivity;

import android.app.TimePickerDialog;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.TextView;
import android.widget.TimePicker;

import java.text.SimpleDateFormat;
import java.util.Calendar;
import java.util.Locale;

public class MainActivity extends AppCompatActivity {

    private Button pickTimeButton;
    private TextView displayTimeText;
    private Calendar calendar;
```

```
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);

        pickTimeButton = findViewById(R.id.pickTimeButton);
        displayTimeText = findViewById(R.id.displayTimeText);
        calendar = Calendar.getInstance();

        pickTimeButton.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                int hour = calendar.get(Calendar.HOUR_OF_DAY);
                int minute = calendar.get(Calendar.MINUTE);

                // Create a TimePickerDialog to pick a time
                TimePickerDialog timePickerDialog = new TimePickerDialog(
                        MainActivity.this,
                        new TimePickerDialog.OnTimeSetListener() {
                            @Override
                            public void onTimeSet(TimePicker view, int hourOfDay, int minute) {
                                calendar.set(Calendar.HOUR_OF_DAY, hourOfDay);
                                calendar.set(Calendar.MINUTE, minute);
                                updateDisplayTime();
                            }
                        },
                        hour, minute, false
                );

                timePickerDialog.show();
            }
        });
    }

    private void updateDisplayTime() {
        SimpleDateFormat sdf = new SimpleDateFormat("hh:mm a", Locale.US);
        String formattedTime = sdf.format(calendar.getTime());
        displayTimeText.setText("Selected Time: " + formattedTime);
    }
}
```


Timepicker
PICK A TIME
Selected Time: 12:09 PM
12:09
AM
PM
12
1
2
3
4
5
6
7
8
9
10
11
CANCEL
OK

Q12] Create an android application to demonstrate working of Option Menu for famouscountries.

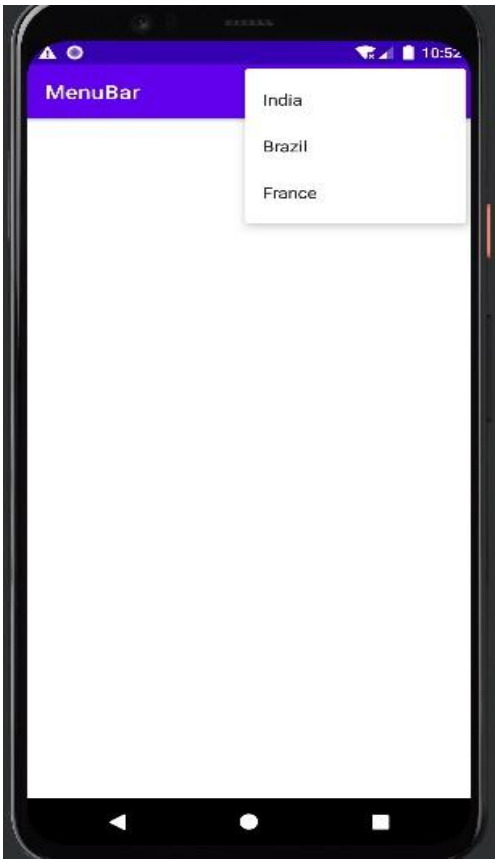
```
package com.example.menubar;

import androidx.annotation.NonNull;
import androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle;
import android.view.Menu;
import android.view.MenuItem;
import android.widget.Toast;

public class OptionMenuBar extends AppCompatActivity {

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_option_menu_bar);

    }

    @Override
    public boolean onCreateOptionsMenu(Menu menu) {
        getMenuInflater().inflate(R.menu.option_menubar,menu);



        return true;
    }

    @Override
    public boolean onOptionsItemSelected(@NonNull MenuItem item) {
        int item_id= item.getItemId();
        switch(item_id){
            case R.id.india:
                Toast.makeText(this,"India is selected",Toast.LENGTH_SHORT).show();
                return true;

            case R.id.brazil:
                Toast.makeText(this,"Brazil is selected",Toast.LENGTH_SHORT).show();
                return true;

            case R.id.france:
                Toast.makeText(this,"France is selected",Toast.LENGTH_SHORT).show();
                return true;
            default:
                return super.onOptionsItemSelected(item);
```

```
        }

    }
}
```

option_menu.xml:

```
<?xml version="1.0" encoding="utf-8"?>
<menu xmlns:android="http://schemas.android.com/apk/res/android">


    <item
        android:title="India"
        android:id="@+id/india"
        />
    <item
        android:title="Brazil"
        android:id="@+id/brazil"
        />
    <item
        android:title="France"
        android:id="@+id/france"
        />
</menu>
```

Output :

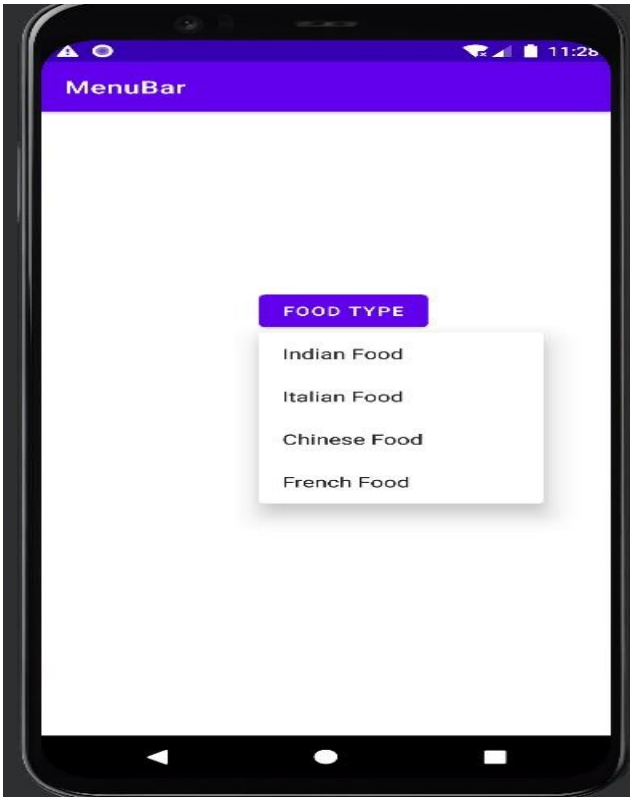


Q13] Create an android application to demonstrate working of popup menu for menu of food

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".PopupMenuBar"
    >
    <Button
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:id="@+id/btn1"
        android:text="Food Type"
        android:layout_marginTop="200dp"
        android:layout_marginLeft="150dp"/>
</LinearLayout>
```

```
package com.example.menubar;
import androidx.appcompat.app.AppCompatActivity;
import android.widget.Button;
import android.widget.PopupMenu;
import android.widget.Toast;

public class PopupMenuBar extends AppCompatActivity {
    Button btn1;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_popup_menu_bar);
        btn1=findViewById(R.id.btn1);
        btn1.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view) {
                PopupMenu popupMenu=new PopupMenu(PopupMenuBar.this,btn1);

popupMenu.getMenuInflater().inflate(R.menu.popup_menu,popupMenu.getMenu());
                popupMenu.setOnMenuItemClickListener(new
PopupMenu.OnMenuItemClickListener() {
                    @Override
                    public boolean onMenuItemClick(MenuItem menuItem) {

Toast.makeText(PopupMenuBar.this,menuItem.getTitle(),Toast.LENGTH_SHORT).show();
                        return true;

                                                                    }
```

```
                                                                                    });
                                                                }
                                                            }
                                                            }
                    });
popupMenu.show();
```



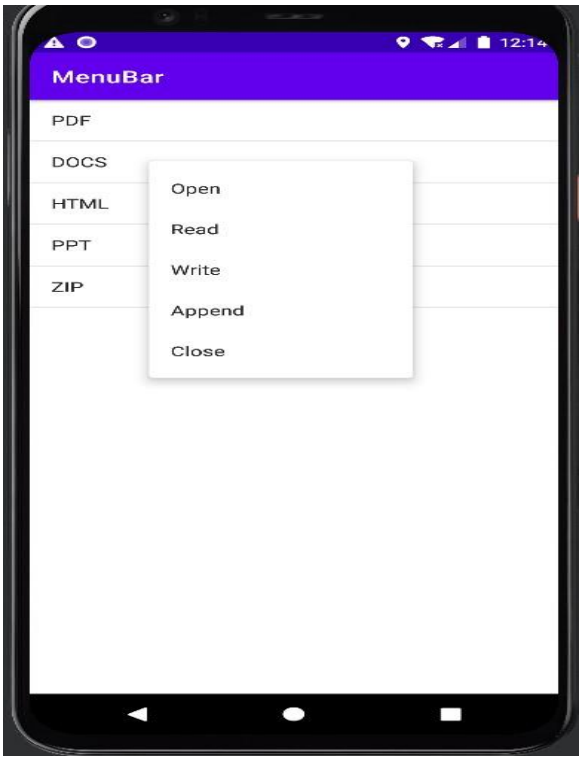
Q14]Create an android application to demonstrate working of Context Menu for all fileoptions

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".ContextMenuBar">
    <ListView
        android:layout_width="match_parent"
        android:layout_height="match_parent"
        android:id="@+id/fileslist"
        />

</LinearLayout>
```

```
package com.example.menubar;

import androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle;
import android.view.ContextMenu;
import android.view.View;
import android.widget.ArrayAdapter;
import android.widget.ListView;

public class ContextMenuBar extends AppCompatActivity {

    ListView file_list;
    String[] files={"PDF","DOCS","HTML","PPT","ZIP"};
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_context_menu_bar);

        file_list=(ListView) findViewById(R.id.fileslist);
        ArrayAdapter<String> adapter=new ArrayAdapter<>(this,
android.R.layout.simple_list_item_1,files);
        file_list.setAdapter(adapter);
        registerForContextMenu(file_list);
    }
    @Override
    public void onCreateContextMenu(ContextMenu menu, View v,
ContextMenu.ContextMenuInfo menuInfo) {
        super.onCreateContextMenu(menu, v, menuInfo);
        getMenuInflater().inflate(R.menu.context_menu,menu);
```

}}

Output :


12:14
MenuBar
PDF
DOCS
HTML
PPT
ZIP
Open
Read
Write
Append
Close

Q15] Create an android application to implement rating bar.

```
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".MainActivity">

    <TextView
        android:id="@+id/txt1"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="Rating Bar Example"
        android:textSize="30dp"
        android:textAlignment="center"
        android:paddingBottom="30dp"/>
    <RatingBar
        android:id="@+id/rating"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_below="@+id/txt1"
        android:layout_centerHorizontal="true"
        android:layout_marginTop="50dp"
        />
    <Button
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:id="@+id/btn1"
        android:text="Submit"
        android:layout_below="@+id/rating"
        android:layout_centerHorizontal="true"
        android:layout_marginTop="40dp"/>

</RelativeLayout>


import androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle;
import  android.view.View;
import android.widget.Button;
import android.widget.RatingBar;
import android.widget.Toast;

public class MainActivity extends AppCompatActivity {
```

```
    RatingBar rating;
    Button btn1;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        rating=findViewById(R.id.rating);
        btn1=findViewById(R.id.btn1);
        btn1.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view) {
                String star= String.valueOf(rating.getRating());

 Toast.makeText(getApplicationContext(),star+"Rating",Toast.LENGTH_SHORT).show();
            }
        });
    }
}
```

Output :